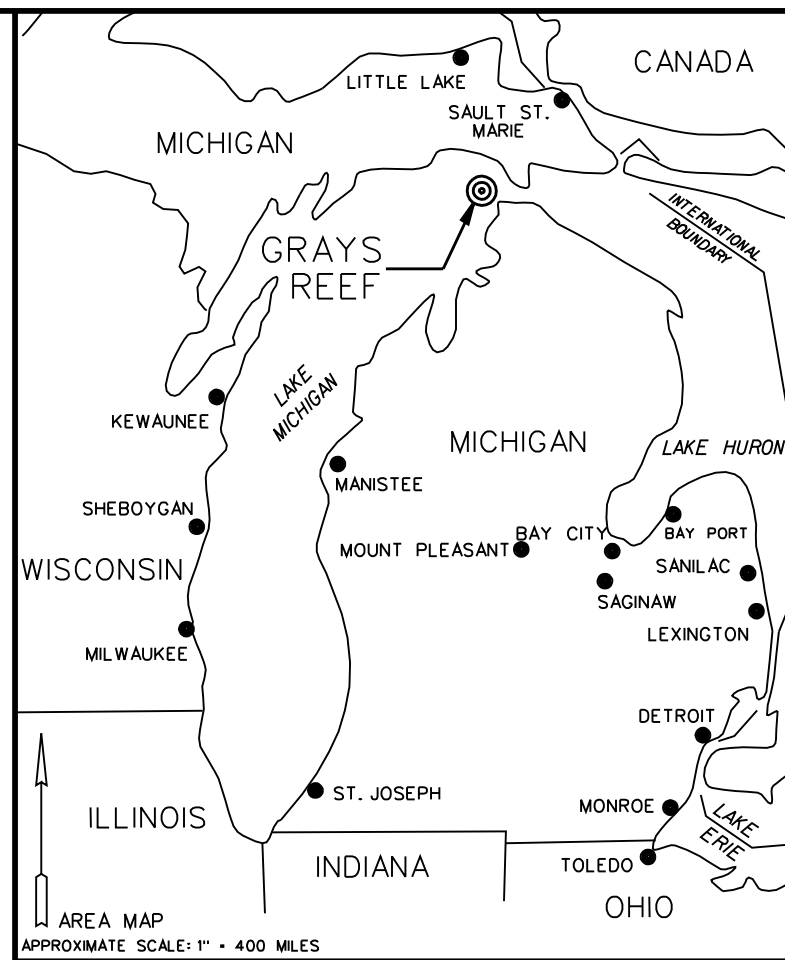


L A K E M I C H I G A N

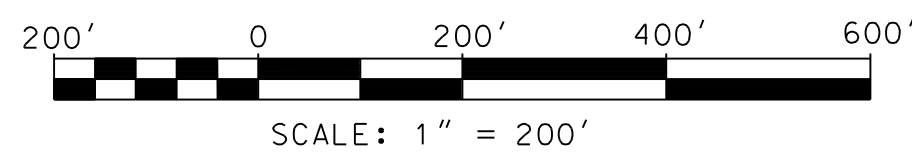
GRAY'S REEF LIGHT

INDEX TO SHEETS  
GRAY'S REEF PASSAGE



②

①



E 19+489.000

DIRECTIONS

ALL DIRECTIONS ARE GRID AZIMUTHS  
REFERRED TO NORTH ZERO.

PROJECT DEPTHS ARE AS SHOWN ON DRAWING.

THE AUTOMATED ELECTRONIC SURVEY WAS  
CONDUCTED BY FRED LEECH, PARTY CHIEF,  
ABOARD THE USACE SURVEY VESSEL WHEELER

AUTOMATED EQUIPMENT USED

POSITIONING: TSS POS-MV  
DATA PROCESSOR: DELL 330 PC  
SOFTWARE: HYPACK  
PLOTTER: ENCAD CADJET 2  
SONIC SOUNDER: RESON SEABAT 8125

LEGEND

THE INFORMATION DEPICTED ON THIS MAP  
REPRESENTS THE RESULTS OF SURVEYS MADE  
ON THE DATES INDICATED AND CAN ONLY BE  
CONSIDERED AS INDICATING THE GENERAL  
CONDITIONS AT THE TIME.

LOW WATER DATUM

ELEVATIONS AND PROJECT DEPTHS ARE  
REFERRED TO INTERNATIONAL GREAT LAKES  
DATUM, (1985).

GRID COORDINATES

GRIDS SHOWN ARE BASED ON NATIONAL  
GEODETIC SURVEY PROJECTION TABLES,  
STATE OF MICHIGAN, CENTRAL ZONE (2112),  
LAMBERT PROJECTION, 1983 NORTH AMERICAN DATUM.

NOTES:

1. GAGES USED WERE OBTAINED FROM NOAA GAGE SITES AT  
PORT INLAND AND MACKINAW CITY, VIA THE INTERNET
2. POSITIONS WERE DETERMINED BY DGPS
3. DEPTH MEASURED USING SEABAT 8125 ULTRA HIGH RESOLUTION  
FOCUSED MULTI-BEAM ECHOSOUNDER SYSTEM.
4. PROJECT DEPTH FOR THIS AREA IS 25.0 FEET.

NO.	DATE	REVISION	BY
U.S. ARMY ENGINEER DISTRICT, DETROIT CORPS OF ENGINEERS DETROIT, MICHIGAN			
DESIGNED BY:*	DETROIT AREA OFFICE 22 JUNE 2004		
DRAWN BY:*	LAKE MICHIGAN GRAY'S REEF PASSAGE		
CHECKED BY:*	CS 50+00 TO CS 95+00 MINIMUM DEPTH PLOT MULTI-BEAM SWEEP SURVEY RESULTS		
REVIEWED BY:*	SCALE AS SHOWN		
CHIEF, TECHNICAL SUPPORT SECTION		CADD FILE NAME	GPM02A00.DGN
(* AS REQUIRED BY ENGINEERING CIRCULAR 1110-1-76)		DRAWING NUMBER	q2s0604.dgn
		SHEET 2 OF 2	